

CLAIMS

1. A modified Staphylococcal enterotoxin B (SEB) having a reduced reactivity with a neutralizing antibody to SEB (anti-SEB antibody).
- 5 2. The modified SEB of claim 1 wherein the reactivity with the anti-SEB antibody was reduced by introducing arbitrary amino acid substitution in the amino acid sequence of SEB.
3. The modified SEB of claim 2 wherein the amino acid
10 substitution was introduced at an epitope recognition site of the anti-SEB antibody in the amino acid sequence of SEB.
4. The modified SEB of claim 2 or 3 wherein the amino acid substitution was introduced within a region from Lys at 226-position to Lys at 229-position in the amino acid
15 sequence of SEB.
5. The modified SEB of claim 4 wherein the amino acid sequence of from 226-position to 229-position in the amino acid sequence of SEB is Leu Phe Ala Ala.
6. The modified SEB of claim 4 wherein the amino acid
20 sequence of from 226-position to 229-position in the amino acid sequence of SEB is Ala Thr Thr Gln.
7. The modified SEB of claim 4 wherein the amino acid sequence of from 226-position to 229-position in the amino acid sequence of SEB is Lys Arg Ile Ile.
- 25 8. The modified SEB of any one of claims 1 to 7

wherein Asn at 23-position in the amino acid sequence of SEB is substituted with Tyr.

9. A prophylactic/remedy for immunopathy comprising as an active ingredient the modified SEB as set forth in any one of claims 1 to 8, wherein said prophylactic/remedy has a reduced immunological response to SEB and an inhibitory activity to T cell activation.

10. The prophylactic/remedy for immunopathy of claim 9 wherein said immunopathy is rheumatoid arthritis.

11. The prophylactic/remedy for immunopathy of claim 9 or 10 which is for oral administration.